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10/552, 184 Page 2

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ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN
L4
     2004:905838 CAPLUS
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     141:381068
TI
     Azo compounds and their salts useful for polarizers with good durability
     and reduced color leakage in visible light region
     Sadamitsu, Yuichi; Kawabe, Kazuyuki
IN
     Nippon Kayaku Kabushiki Kaisha, Japan; Polatechno Co., Ltd.
PA
S<sub>0</sub>
     PCT Int. Appl., 35 pp.
     CODEN: PIXXD2
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     Japanese
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                                                                          20040415
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                                   20060517
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     US 2007079740
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                                   20070412
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                                                                          20051006
PRAI JP 2003-111419
                                   20030416
                             Α
     WO 2004-JP5364
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                                   20040415
     MARPAT 141:381068
GI
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AB The present invention relates to (i) azo compds. I and (ii) their salts or their copper complex compds., wherein A = Ph or naphthyl having 1-3 substituents such as sulfo, amino, lower alkyl, and lower alkoxy; B = H, sulfo, lower alkyl, or lower alkoxy; R1, R2, R3, R4 = independently H, halogeno, lower alkyl, or lower alkoxy; D = NHCO, N:N, or NH; E = H or Ph having 1-3 substituents such as lower alkyl, hydroxy, and amino; n = 0 or 1; and m = 0 or 1. Thus, 17.3 parts 3-aminobenzenesulfonic acid and 18.8 parts 2,4-diaminobenzenesulfonic acid were coupled, 200 parts 28% aqueous ammonia and 125 parts copper sulfate pentahydrate were added therein and triazotized at 80° for 5 h, 7.0 parts of the resulting triazo compound was mixed with 32 parts 35% hydrochloric acid and 6.9 parts sodium nitrite, stirred at 25-30° for 2 h, 10.9 parts 3-methylaniline was added therein and stirred, and adjusted at pH 3 to give a monoazo compound, 32 parts 35% hydrochloric acid and 6.9 parts sodium nitrite were added therein and stirred, 12.1 parts 2,5-dimethylaniline was added therein and stirred to give a disazo compound, which was diazotized and coupled with

10/552, 184

6-(4'-aminobenzoyl)amino-3-sulfo-2-naphthol, and sodium chloride was added therein to give a trisazo compound sodium salt with \max 547 nm, 0.03% of which was mixed with 0.1% natural sodium sulfate in water, a polyvinyl alc. substrate was soaked therein, stretched 5-folds in 3% aqueous boric acid solution, washed, and dried to give a polarizing film with $\lambda max~550$ nm and polarizing ratio 99.9%. 782474-73-1P~782474-75-3P~782474-77-5P

782474-79-7P 782474-80-0P 782474-81-1P

782474-82-2P 782474-83-3DP, copper complexes

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(preparation of azo compds. and their salts useful for polarizers with good durability and reduced color leakage in visible light region)

782474-73-1 CAPLUS

IT

RN

CN

2H-Benzotriazole-5-sulfonic acid, 6-[[4-[[4-[[4-[4-minobenzoyl)amino]-1hydroxy-3-sulfo-2-naphthalenyl]azo]-5-methoxy-2-methylphenyl]azo]-2methylphenyl]azo]-2-(3-sulfophenyl)-, trisodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c|c} & \text{OMe} \\ & \text{OMe} \\ & \text{OMe} \\ & \text{N} \\ & \text{N}$$

D3 Na

PAGE 1-B

782474-75-3 CAPLUS

RN $\label{eq:Benzoic_acid} Benzoic_{acid}, \ 2-[5-[[4-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-hydroxy-3-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-sulfo-2-hydroxy-3-hydroxy-3-sulfo-2-hydroxy-3-hydroxy-3-hydroxy-3-hydroxy-3-hydroxy-3-hydroxy-3-hydroxy-3-hydroxy-3-hydroxy-3-hydroxy-3-hydroxy-3-hydroxy-3-$ CN naphthalenyl]azo]-2,5-dimethylphenyl]azo]-2-methylphenyl]azo]-6-sulfo-2Hbenzotriazol-2-yl]-4-sulfo-, tetrasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

●4 Na

PAGE 1-B

RN

782474-77-5 CAPLUS Benzoic acid, 2-[5-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2, 5-dimethylphenyl]azo]-2-methylphenyl]azo]-6-sulfo-2H-benzotriazol-2-yl]-, trisodium salt (9CI) (CA INDEX NAME)CN

●3 Na

PAGE 1-B

782474-79-7 CAPLUS RN

2H-Benzotriazole-5-sulfonic acid, 6-[[4-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2, 5-dimethylphenyl]azo]-2-methylphenyl]azo]-2-(4-sulfophenyl)-, trisodium salt (9CI) (CA INDEXNAME)

PAGE 1-A

●3 Na

PAGE 1-B

RN

 $782474-80-0 \quad \text{CAPLUS} \\ \text{Benzoic acid, } 2-[5-[[4-[[4-[[6-(benzoylamino)-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2,5-dimethylphenyl]azo]-2-methylphenyl]azo]-6-sulfo-2H-benzotriazol-2-yl]-4-sulfo-, tetrasodium salt (9CI) (CA INDEX NAME)$ CN

PAGE 1-A

●4 Na

PAGE 1-B

RN 782474-81-1 CAPLUS

CN Benzoic acid, 2-[5-[[4-[[4-[[1-hydroxy-6-[(4-hydroxyphenyl)azo]-3-sulfo-2-naphthalenyl]azo]-2,5-dimethylphenyl]azo]-2-methylphenyl]azo]-6-sulfo-2H-benzotriazol-2-yl]-4-sulfo-, tetrasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

•4 Na

PAGE 1-B

RN 782474-82-2 CAPLUS

CN Benzoic acid, 2-[5-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2,5-dimethylphenyl]azo]-2-methylphenyl]azo]-6-methyl-2H-

benzotriazol-2-yl]-5-sulfo-, trisodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

●3 Na

PAGE 1-B

RN 782474-83-3 CAPLUS

CN 2H-Benzotriazole-5-sulfonic acid, 6-[[4-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2,5-dimethylphenyl]azo]-2-methylphenyl]azo]-2-(3-sulfophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IT 782474-72-0P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of azo compds. and their salts useful for polarizers with good durability and reduced color leakage in visible light region)

782474-72-0 CAPLUS

RN

CN

2H-Benzotriazole-5-sulfonic acid, 6-[[4-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2,5-dimethylphenyl]azo]-2-methylphenyl]azo]-2-(3-sulfophenyl)-, trisodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

●3 Na

PAGE 1-B

RE. CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L5			-						"SADAMITSU YUICHI"/AU
L6				15	SEA	FILE=CAPLUS	ABB=ON	PLU=0N	"KAWABE KAZUYUKI"/AU
L7				19	SEA	FILE=CAPLUS	ABB=ON	PLU=0N	L5 OR L6
L8				5	SEA	FILE=CAPLUS	ABB=ON	PLU=0N	L7 AND AZO

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ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN
     2006:512627 CAPLUS
DN
     145:9678
     Azo compounds and dye-type polarizing films or plates containing
ΤI
     the same
IN
     Sadamitsu, Yuichi
     Nippon Kayaku Kabushiki Kaisha, Japan; Polatechno Co., Ltd.
PA
S<sub>0</sub>
     PCT Int. Appl., 28 pp.
     CODEN: PIXXD2
DT
     Patent
     Japanese
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FAN. CNT 1
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                                   20060601
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PRAI JP 2004-338876

OS G I MARPAT 145:9678

AB Azo compds. whose free acid forms are represented by the general formula I (R1 = S02, C00H, lower alkoxy group; R2 = S02, C00H, lower alkyl, lower alkoxy; with a proviso that both R1 and R2 are not S02 at the same time; R3-6 = H, lower alkyl, lower alkoxy; R7, R8 = H, amino, OH, S02, C00H group) are extremely useful as the dichroic dye for polarizing plates which are excellent in polarization performance and endurance and reduced in the color cross-talk within the visible light region or in polarizers for liquid crystal projectors made by using them.

RE. CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/552, 184 Page 11

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ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
L8
     2005:1004846 CAPLUS
AN
     143:307328
DN
     Water-based polyvinyl alcohol-containing adhesives for polarizing elements
     and polarizers
IN
     Kawabe, Kazuyuki
     Nippon Kayaku Kabushiki Kaisha, Japan; Polatechno Co., Ltd.
PA
S0
     PCT Int. Appl., 22 pp.
     CODEN: PIXXD2
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     Japanese
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                                 20061115
                                              EP 2005-719937
                                                                      20050303
     EP 1721951
                           A 1
         R: CH, DE, FR, GB, LI, NL
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                                 20070307
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PRAI JP 2004-59254
                                 20040303
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     WO 2005-JP3633
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AB
     Title adhesives for polarizing elements and polarizers, which have
     sufficient adhesion strength at high temperature and humidity, is composed of
     polyvinyl alc. 100, a resin having a maleic anhydride skeleton in the
     structure, such as isobutylene-maleic anhydride copolymer, 1-1000, and an
     polyvinyl alc. polarizing elements and a protective film, such as
     cellulose acetate film, adhering with the above adhesives are also
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epoxy group-containing crosslinking agent, 0.5-5,000. Polarizers composed of provided. Thus, polyvinyl alc., isobutene-maleic anhydride copolymer (Isobam 18), and polyglucose polyglycidyl ether (Denacol EX 521) were mixed to receive an adhesive composition, which was used to adhere a polarizing element prepared from dyeing a polyvinyl alc. film with an azo dye and stretching, with a cellulose triacetate film to receive a polarizer.

THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD RE. CNT 22 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:823777 CAPLUS

DN 143:231358

TI Azo compounds for polarizing films and polarizing plates with good polarizing performance and durability, and reduced in color leakage in visible light region

IN Sadamitsu, Yuichi

PA Nippon Kayaku Kabushiki Kaisha, Japan; Polatechno Co., Ltd.

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent LA Japanese

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	PAT	TENT	NO.	•		KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
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PRAI		2004		42		A		2004									•	
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GI																		

AB The present invention relates to azo compds. I as a dichroic dye for polarizing films and polarizing plates, wherein R1, R2 = sulfo, carboxy, lower alkyl, or lower alkoxy; R3 = lower alkyl, lower alkoxy, or acetylamino; R4, R5, R6 = H, lower alkyl, lower alkoxy, or acetylamino; and R7 = H, amino, or hydroxy. Thus, 20.3 parts 2-amino-5-methoxybenzenesulfonic acid was dissolved in 500 parts water, sodium hydroxide was added therein and dissolved, 32 parts 35% hydrochlic acid and 6.9 parts sodium nitrite were added therein and stirred at 5-10° for 1 h, 10.7 parts 3-methylaniline was added therein and stirred at 30-40°, adjusted at pH 3, 32 parts 35% hydrochloride and 6.9 parts sodium nitrite were added therein and stirred at 25-30° for 2 h, 12.1 parts 2,5-dimethylaniline was added therein and stirred ar 20-30°, adjusted pH at 3 and stirred to give a disazo dye, 15 parts of which was diazotized and reacted with 35.8 parts 6-(4'-

10/552, 184 Page 13

aminobenzoyl)amino-3-sulfonic acid-1-naphthol to give a trisazo compound, 0.03% of the resulting trisazo compound and 0.1% sodium sulfate was dissolved in water, a polyvinyl alc. film was soaked in the resulting solution for 4 min, stretched 5-folds in an aqueous boric acid solution, washed, and dried to give a polarizing film, showing \(\text{\text{Mmax}} \) 555 nm, polarizing rate 99.9%, and polarizing rate change ratio 0.25%.

RE. CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN
     2004:905838 CAPLUS
     141:381068
DN
ΤI
     Azo compounds and their salts useful for polarizers with good
     durability and reduced, color leakage in visible light region
IN
     Sadamitsu, Yuichi; Kawabe, Kazuyuki
     Nippon Kayaku Kabushiki Kaisha, Japan; Polatechno Co., Ltd.
PA
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     PCT Int. Appl., 35 pp.
     CODEN: PIXXD2
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PRAI JP 2003-111419
                                    20030416
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                                    20040415
     WO 2004-JP5364
     MARPAT 141:381068
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$$\begin{array}{c} A \\ N-N \\ N \end{array}$$

$$\begin{array}{c} R2 \\ N=N-M \end{array}$$

$$\begin{array}{c} R4 \\ N=N-M \end{array}$$

$$\begin{array}{c} OH \\ N=N-M \end{array}$$

$$\begin{array}{c} OH \\ N=N-M \end{array}$$

$$\begin{array}{c} D-E \\ (SO_3H)_m \end{array}$$

The present invention relates to (i) azo compds. I and (ii) AB their salts or their copper complex compds., wherein A = Ph or naphthyl having 1-3 substituents such as sulfo, amino, lower alkyl, and lower alkoxy; B = H, sulfo, lower alkyl, or lower alkoxy; R1, R2, R3, R4 = independently H, halogeno, lower alkyl, or lower alkoxy; D = NHCO, N:N, or NH; E = H or Ph having 1-3 substituents such as lower alkyl, hydroxy, and amino; n=0 or 1; and m=0 or 1. Thus, 17.3 parts 3-aminobenzenesulfonic acid and 18.8 parts 2,4-diaminobenzenesulfonic acid were coupled, 200 parts 28% aqueous ammonia and 125 parts copper sulfate pentahydrate were added therein and triazotized at 80° for 5 h, 7.0 parts of the resulting triazo compound was mixed with 32 parts 35% hydrochloric acid and 6.9 parts sodium nitrite, stirred at 25-30° for 2 h, 10.9 parts 3-methylaniline was added therein and stirred, and adjusted at pH 3 to give a monoazo compound, 32 parts 35% hydrochloric acid and 6.9 parts sodium nitrite were added therein and stirred, 12.1 parts 2,5-dimethylaniline was added therein and stirred to give a disazo compound, which was diazotized and coupled with 6-(4'-aminobenzoyl)amino-3-sulfo-2naphthol, and sodium chloride was added therein to give a trisazo compound

sodium salt with λ max 547 nm, 0.03% of which was mixed with 0.1% natural sodium sulfate in water, a polyvinyl alc. substrate was soaked therein, stretched 5-folds in 3% aqueous boric acid solution, washed, and dried to give a polarizing film with λ max 550 nm and polarizing ratio 99.9%.

RE. CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L8 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
- 'AN 2003:582990 CAPLUS
- DN 139:150704
- TI Fabrication of polarizing films containing bisazo dyes for polarizing plates used in liquid crystal projector blue channel
- IN Oiso, Shoji; Tabei, Toru; Kawabe, Kazuyuki; Sadamitsu,
- PA Nippon Kayaku Co., Ltd., Japan; Polatechno Co., Ltd.
- SO Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JKXXAF
- DT Patent
- LA Japanese
- FAN. CNT

N. CNT 1 PATENT NO		DATE	APPLICATION NO.	DATE ·
JP 200321	5338 A	20030730	JP 2002-12302	20020122

PRAI JP 2002-12302

AB The title films contain at least one bisazo type water-soluble dye, C. I. Direct Yellow 28, and C. I. Direct Orange 39 in substrate materials such as poly(vinyl alc.), and the polarizing plates are fabricated by covering one or both sides of the polarizing film with protective films. Thus, reacting 29.9 parts 4-aminoazobenzene-4'-sulfonic acid sodium salt with 31.5 parts 6-phenylamino-1-hydroxynaphthalene-3-sulfonic acid in the presence of HCl and sodium nitrite gave a bisazo water-soluble dye, 0.03% of which was mixed with 0.01% C. I. Direct Yellow 28, 0.05% C. I. Direct Orange 39 and 0.1% Glauber's salt to give an aqueous solution, which was then used for impregnating a poly(vinyl alc.) film for 4 min at 45° to give a polarizing film after the workup.

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(FILE 'HOME' ENTERED AT 14:06:55 ON 18 JUL 2007)

FILE 'REGISTRY' ENTERED AT 14:07:15 ON 18 JUL 2007 L1 STRUCTURE UPLOADED 3 SEA SSS SAM L1 L2 16 SEA SSS FUL L1 L3 FILE 'CAPLUS' ENTERED AT 14:08:05 ON 18 JUL 2007 L4 1 SEA ABB=ON PLU=ON L3 D QUE L4 STAT D BIB ABS HITSTR E SADAMITSU YUICHI/AU 7 SEA ABB=ON PLU=ON "SADAMITSU YUICHI"/AU L5 SEA ABB=ON PLU=ON "KAWABE KAZUYUKI"/AU 15 SEA ABB=ON PLU=ON "KAWABE H 19 SEA ABB=ON PLU=ON L5 OR L6 L6 L7 5 SEA ABB=ON PLU=ON L7 AND AZO L8 D QUE L8 STAT D 1-5 BIB ABS

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FILE REGISTRY

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FILE CAPLUS

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http://www.cas.org/infopolicy.html

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ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
AN
     2004:905838 CAPLUS
DN
     141:381068
TT
     Azo compounds and their salts useful for polarizers with good durability
     and reduced color leakage in visible light region
IN
     Sadamitsu, Yuichi; Kawabe, Kazuyuki
PA
     Nippon Kayaku Kabushiki Kaisha, Japan; Polatechno Co., Ltd.
S0
     PCT Int. Appl., 35 pp.
     CODEN: PIXXD2
DT
     Patent
      Japanese
LA
FAN. CNT 1
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                                                  APPLICATION NO.
                                                                            DATE
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PΙ
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     WO 2004-JP5364
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     MARPAT 141:381068
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$$\begin{array}{c} A \\ N-N \\ N \end{array}$$

$$\begin{array}{c} R2 \\ N=N-1 \\ R1 \\ N=N-1 \\ R3 \\ H03S \\ \end{array}$$

$$\begin{array}{c} OH \\ OH \\ N=N-1 \\ (S03H)_m \\ I \\ \end{array}$$

AB The present invention relates to (i) azo compds. I and (ii) their salts or their copper complex compds., wherein A = Ph or naphthyl having 1-3 substituents such as sulfo, amino, lower alkyl, and lower alkoxy; B = H, sulfo, lower alkyl, or lower alkoxy; R1, R2, R3, R4 = independently H, halogeno, lower alkyl, or lower alkoxy; D = NHCO, N:N, or NH; E = H or Ph having 1-3 substituents such as lower alkyl, hydroxy, and amino; n = 0 or 1; and m = 0 or 1. Thus, 17.3 parts 3-aminobenzenesulfonic acid and 18.8 parts 2,4-diaminobenzenesulfonic acid were coupled, 200 parts 28% aqueous ammonia and 125 parts copper sulfate pentahydrate were added therein and triazotized at 80° for 5 h, 7.0 parts of the resulting triazo compound was mixed with 32 parts 35% hydrochloric acid and 6.9 parts sodium nitrite, stirred at 25-30° for 2 h, 10.9 parts 3-methylaniline was added therein and stirred, and adjusted at pH 3 to give a monoazo compound, 32 parts 35% hydrochloric acid and 6.9 parts sodium nitrite were added therein and stirred, 12.1 parts 2,5-dimethylaniline was added therein and stirred to give a disazo compound, which was diazotized and coupled with 6-(4'-aminobenzoyl)amino-3-sulfo-2-naphthol, and sodium chloride was added therein to give a trisazo compound sodium salt with λmax 547 nm,

0.03% of which was mixed with 0.1% natural sodium sulfate in water, a polyvinyl alc. substrate was soaked therein, stretched 5-folds in 3% aqueous boric acid solution, washed, and dried to give a polarizing film with λ_{max} 550 nm and polarizing ratio 99.9%.

782474-73-1P 782474-75-3P 782474-77-5P 782474-79-7P 782474-80-0P 782474-81-1P

782474-82-2P 782474-83-3DP, copper complexes

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(preparation of azo compds. and their salts useful for polarizers with good

durability and reduced color leakage in visible light region)

RN 782474-73-1 CAPLUS

IT

CN

2H-Benzotriazole-5-sulfonic acid, 6-[[4-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-5-methoxy-2-methylphenyl]azo]-2-methylphenyl]azo]-2-(3-sulfophenyl)-, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

PAGE 1-B

RN 782474-75-3 CAPLUS

CN Benzoic acid, 2-[5-[[4-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2,5-dimethylphenyl]azo]-2-methylphenyl]azo]-6-sulfo-2H-benzotriazol-2-yl]-4-sulfo-, tetrasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

4 Na

PAGE 1-B

RN

 $782474-77-5 \quad \text{CAPLUS} \\ \text{Benzoic acid, } 2-[5-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2, } 5-dimethylphenyl]azo]-2-methylphenyl]azo]-6-sulfo-2H-benzotriazol-2-yl]-, trisodium salt (9CI) (CA INDEX NAME)$ CN

PAGE 1-A

●3 Na

PAGE 1-B

782474-79-7 CAPLUS

RN CN 2H-Benzotriazole-5-sulfonic acid, 6-[[4-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2, 5-dimethylphenyl]azo]-2-methylphenyl]azo]-2-(4-sulfophenyl)-, trisodium salt (9CI) (CA INDEXNAME)

PAGE 1-A

3 Na

PAGE 1-B

RN

782474-80-0 CAPLUS Benzoic acid, 2-[5-[[4-[[4-[[6-(benzoylamino)-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2,5-dimethylphenyl]azo]-2-methylphenyl]azo]-6-sulfo-2H-CN benzotriazol-2-yl]-4-sulfo-, tetrasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

Na

PAGE 1-B

782474-81-1 CAPLUS Benzoic acid, 2-[5-[[4-[[4-[[1-hydroxy-6-[(4-hydroxyphenyl)azo]-3-sulfo-2-naphthalenyl]azo]-2, 5-dimethylphenyl]azo]-2-methylphenyl]azo]-6-sulfo-2H-CN benzotriazol-2-yl]-4-sulfo-, tetrasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

Na

PAGE 1-B

RN

782474-82-2 CAPLUS
Benzoic acid, 2-[5-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-CN naphthalenyl]azo]-2,5-dimethylphenyl]azo]-2-methylphenyl]azo]-6-methyl-2H-

benzotriazol-2-yl]-5-sulfo-, trisodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

●3 Na

PAGE 1-B

RN 782474-83-3 CAPLUS

CN 2H-Benzotriazole-5-sulfonic acid, 6-[[4-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2,5-dimethylphenyl]azo]-2-methylphenyl]azo]-2-(3-sulfophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IT 782474-72-0P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of azo compds: and their salts useful for polarizers with good durability and reduced color leakage in visible light region)

RN 782474-72-0 CAPLUS CN

2H-Benzotriazole-5-sulfonic acid, 6-[[4-[[4-[[6-[(4-aminobenzoyl)amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]-2,5-dimethylphenyl]azo]-2-methylphenyl]azo]-2-(3-sulfophenyl)-, trisodium salt (9CI) (CA INDEX

PAGE 1-A

●3 Na

PAGE 1-B

RE. CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1959:20196 CAPLUS

DN 53:20196 OREF 53:3713a-d TI Polyazo dyes Hanhart, Walter IN PA C I B A Ltd.

Patent DT LA Unavailable

FAN. CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

19580215 CH 326553 CH

PΙ Gray to black shades on cotton are obtained with coppered dyes with the general formula RN = NR'N = NR''N = NR''', in which R is a heterocyclic 5-membered ring containing at least 2 hetero atoms of which one is N, R' $R^{\prime\prime}$ are aromatic rings linked with azo groups in the 1- and 4-positions, $R^{\prime\prime}$ contains an alkoxy group in ortho position to N2R $^{\prime\prime\prime}$, and $R^{\prime\prime\prime}$ is a hydroxynaphthalene ring with the azo bond in ortho position to the OH group. Thus, 28.2 parts dye, made by coupling diazotized 6-aminobenzotriazole (I) with 1-amino-2-methoxy-5-methylbenzene (II), is diazotized and coupled with 1-amino-2, 5-dimethoxybenzene (III) 15.3 in the presence of NaOAc. The filtered disazo dye is dissolved in dilute NaOH, diazotized several hrs. at room temperature by addition of NaNO2 8 and naphthalene-1-sulfonic acid, the diazo compound is salted out and coupled with 2-amino-8-hydroxynaphthalene-6-sulfonic acid (IV) 23.9 in the presence of a little pyridine. The product, after coppering, dyes cotton black shades, fast to washing and light. The dye, prepared from diazotized I and PhNH2. HO3SMe, is diazotized and coupled with 2,5-(MeO)2C6H3NH2. The product is treated with NaNO2 and 1-naphthalenesulfonic acid and after several hrs. added to the solution of IV to give a similar black dye, which after-coppered is wash- and light-fast. In cases where coupling of II and (or) III is slow, the corresponding methanesulfonic acid facilitates coupling, after which this group is removed.

117100-39-7P, 1-Naphthol-3-sulfonic acid, 7-amino-2-[4-[p-IT (benzotriazol-5-ylazo)phenylazo]-2,5-dimethoxyphenylazo]-121848-15-5P, 1-Naphthol-3-sulfonic acid, 7-amino-2-[4-[4-(benzotriazol-5-ylazo)-6-methoxy-m-tolylazo]-2,5-dimethoxyphenylazo]-RL: PREP (Preparation)

(preparation of)

RN 117100-39-7 CAPLUS 1-Naphthol-3-sulfonic acid, 7-amino-2-[4-[p-(benzotriazol-5-CN ylazo)phenylazo]-2,5-dimethoxyphenylazo]- (6CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN CN

PAGE 1-A

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PAGE 1-B

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L12

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FILE HOME

FILE REGISTRY

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STRUCTURE FILE UPDATES: 17 JUL 2007 HIGHEST RN 942577-08-4 DICTIONARY FILE UPDATES: 17 JUL 2007 HIGHEST RN 942577-08-4

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FILE CAPLUS

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FILE COVERS 1907 - 18 Jul 2007 VOL 147 ISS 4 FILE LAST UPDATED: 17 Jul 2007 (20070717/ED)

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FULL ESTIMATED COST .	11. 48	384. 61
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